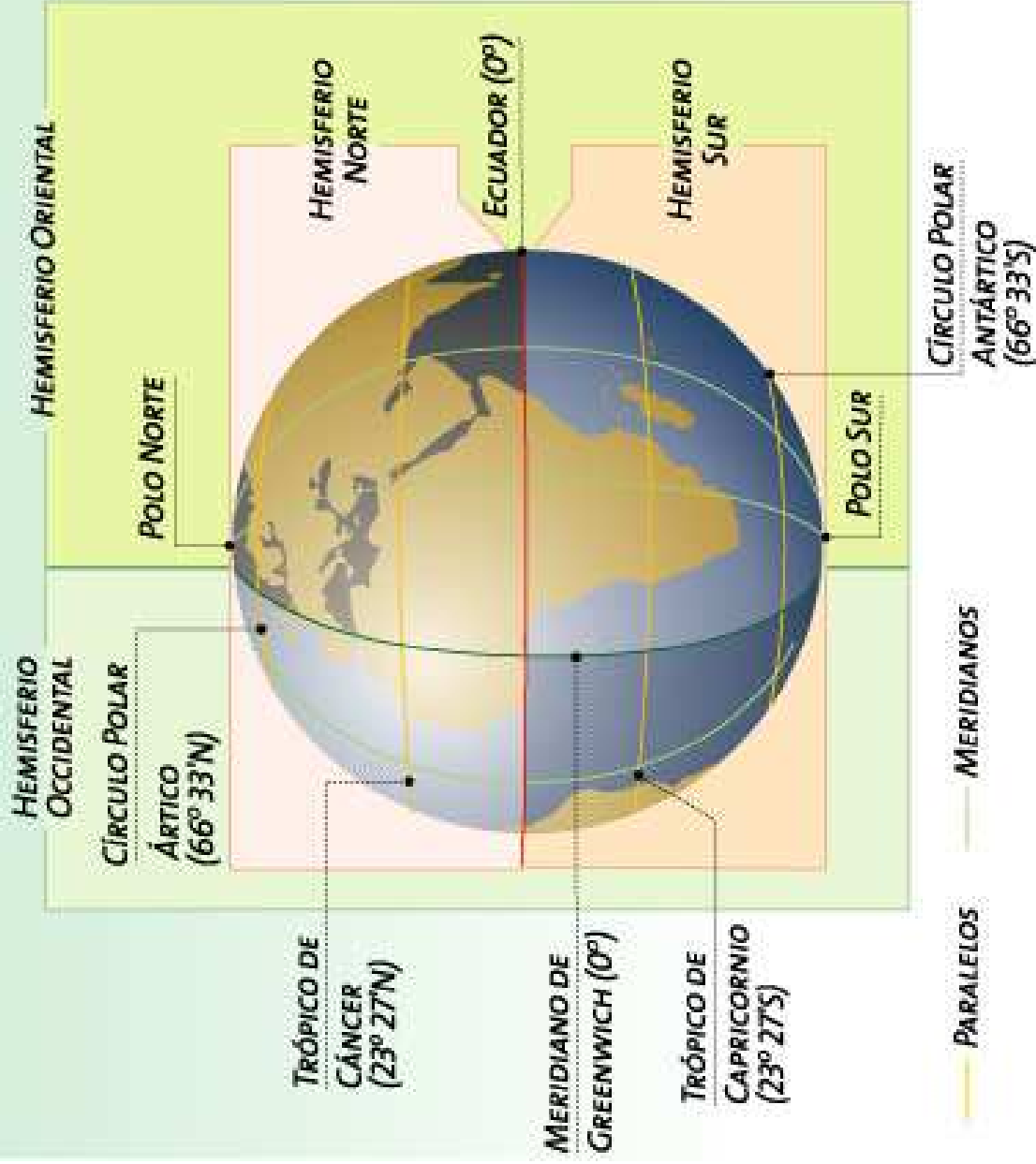


Líneas imaginarias

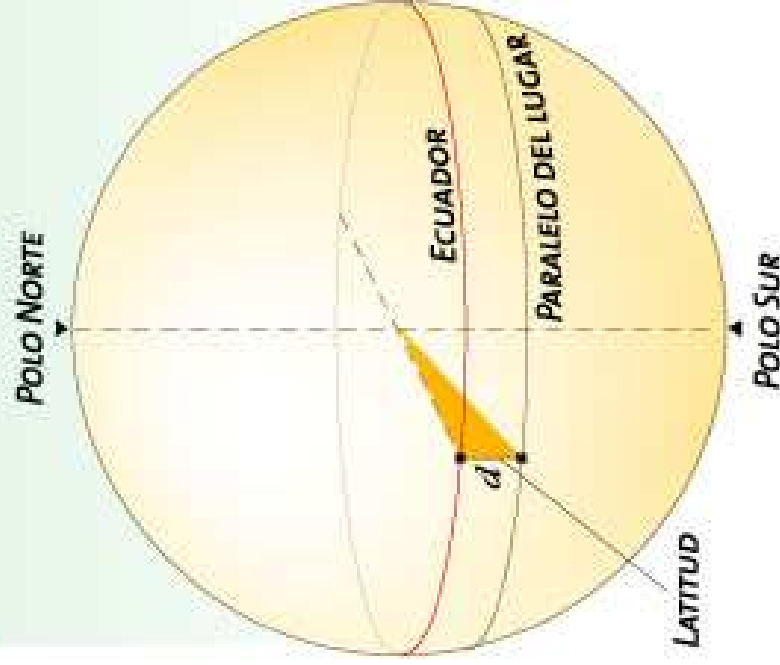
Las principales líneas imaginarias trazadas por el hombre para ubicarnos en el globo terrestre son: los **Trópicos** de Cáncer ($23^{\circ}27'N$) y de Capricornio ($23^{\circ}27'S$); los **Círculos polares**, Ártico ($66^{\circ}33'N$) y Antártico ($66^{\circ}33'S$); y el **meridiano** y el **paralelo cero** (Greenwich y Ecuador), que nos permiten determinar la longitud y la latitud, respectivamente.



Latitud y longitud

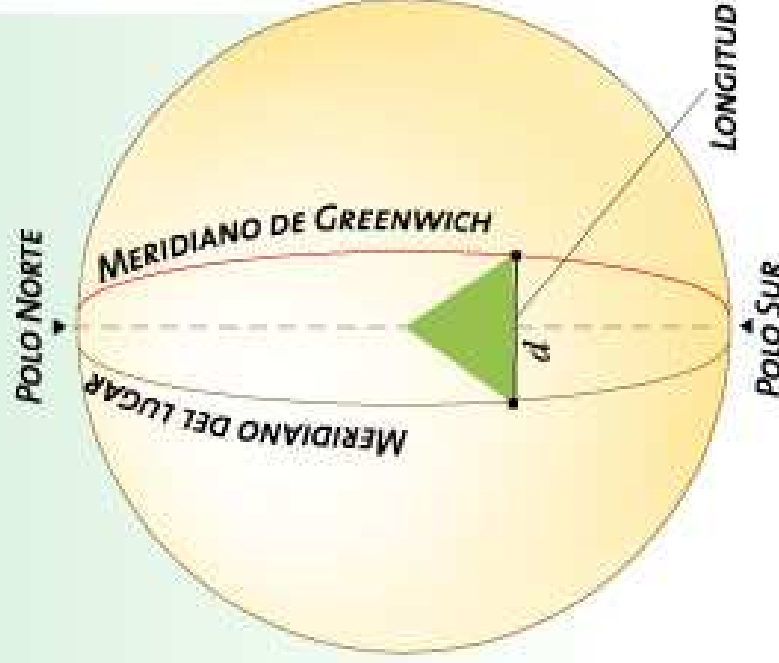
LATITUD

La latitud es la distancia (d) medida en grados, que existe entre un punto cualquiera de la superficie terrestre y la línea ecuatorial. Se establece mediante los paralelos, por lo que se expresa entre 0° y 90° . Es latitud norte cuando se trata del hemisferio norte y latitud sur cuando el lugar que se desea ubicar se encuentra en el hemisferio sur.

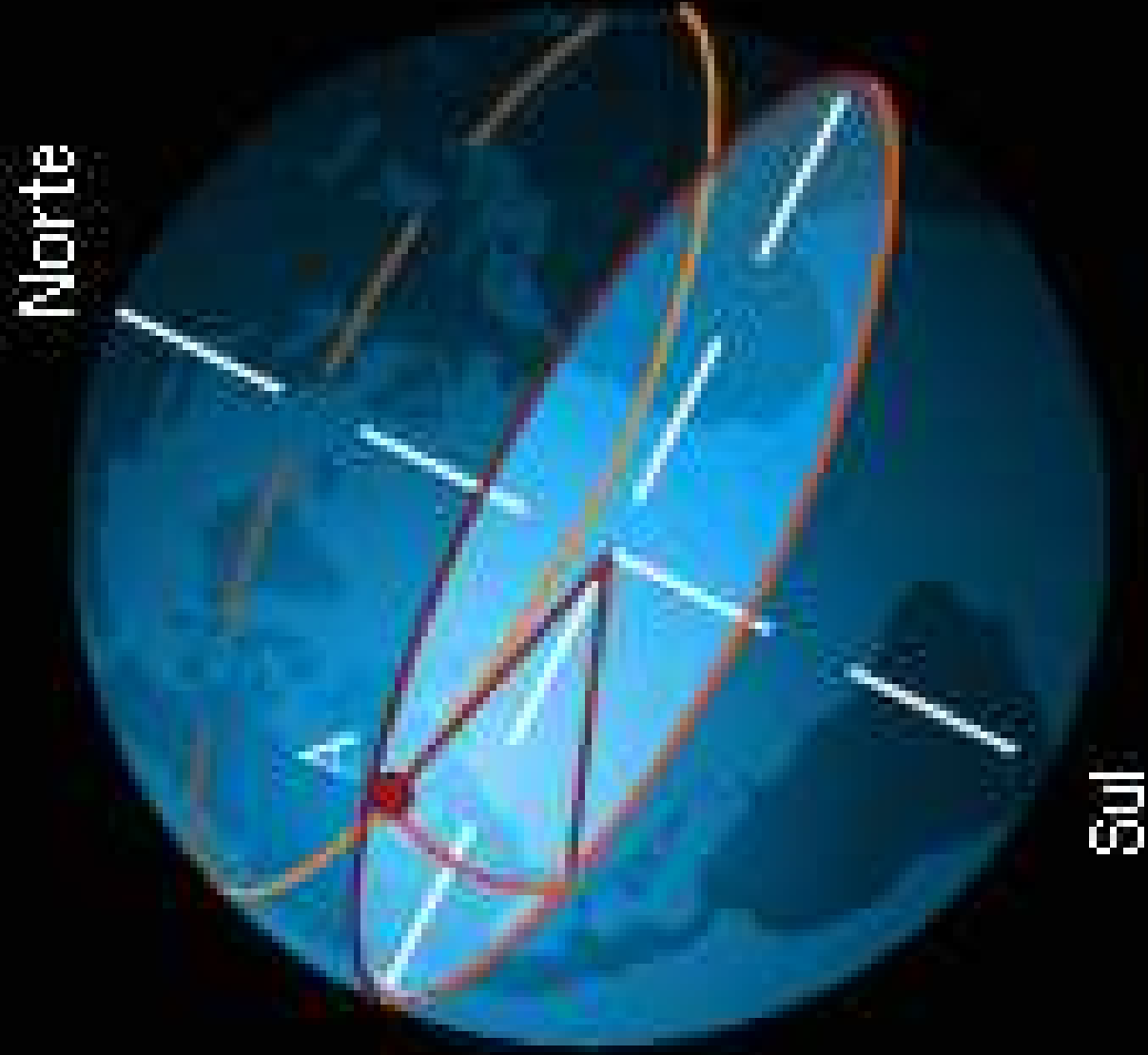


LONGITUD

La longitud es la distancia (d) entre un punto cualquiera y el meridiano de origen o Greenwich. Se expresa en grados de 0 a 180 y puede ser este y oeste, según el hemisferio en el que se halle el lugar que se desea localizar.

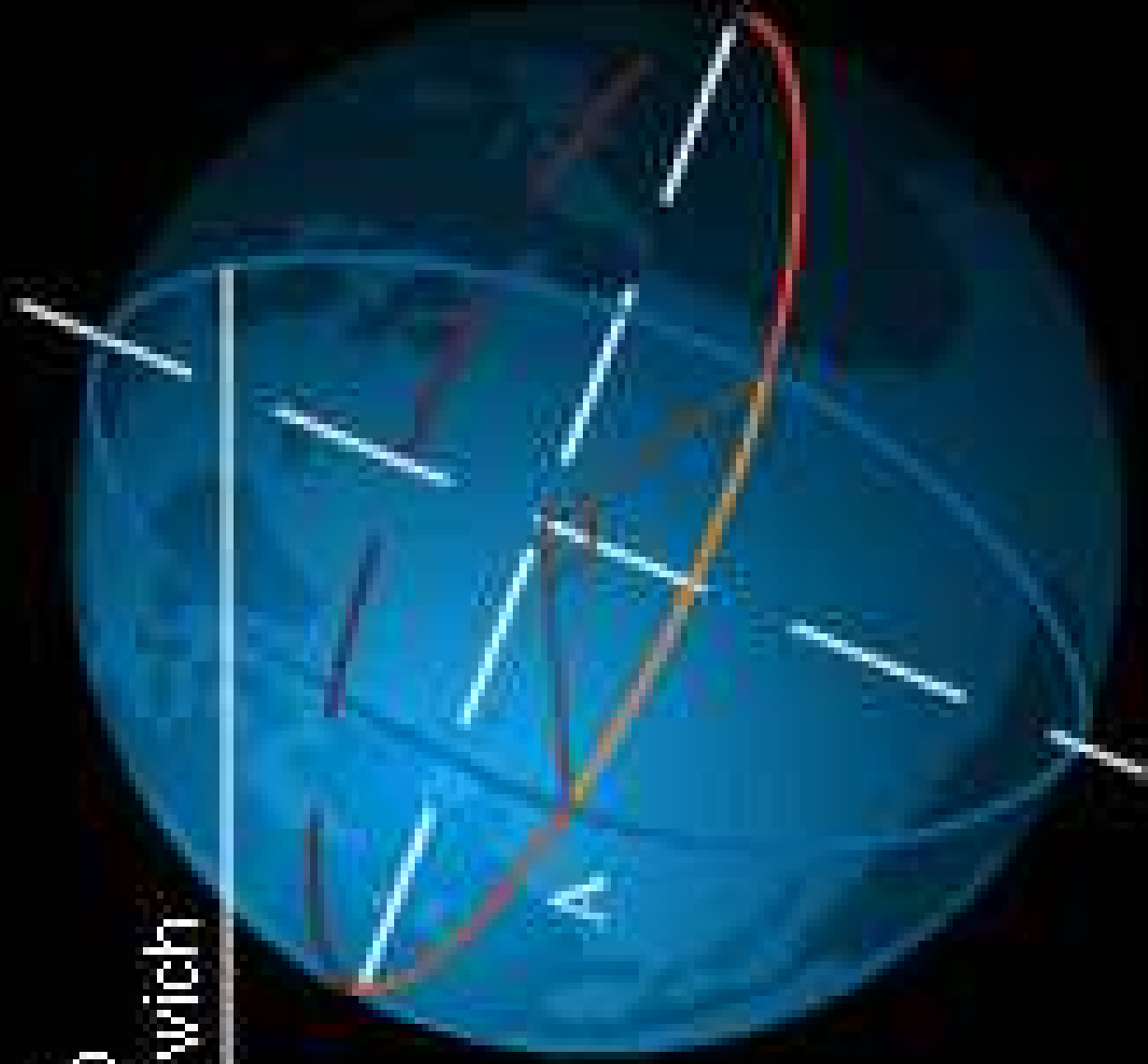


Latitude

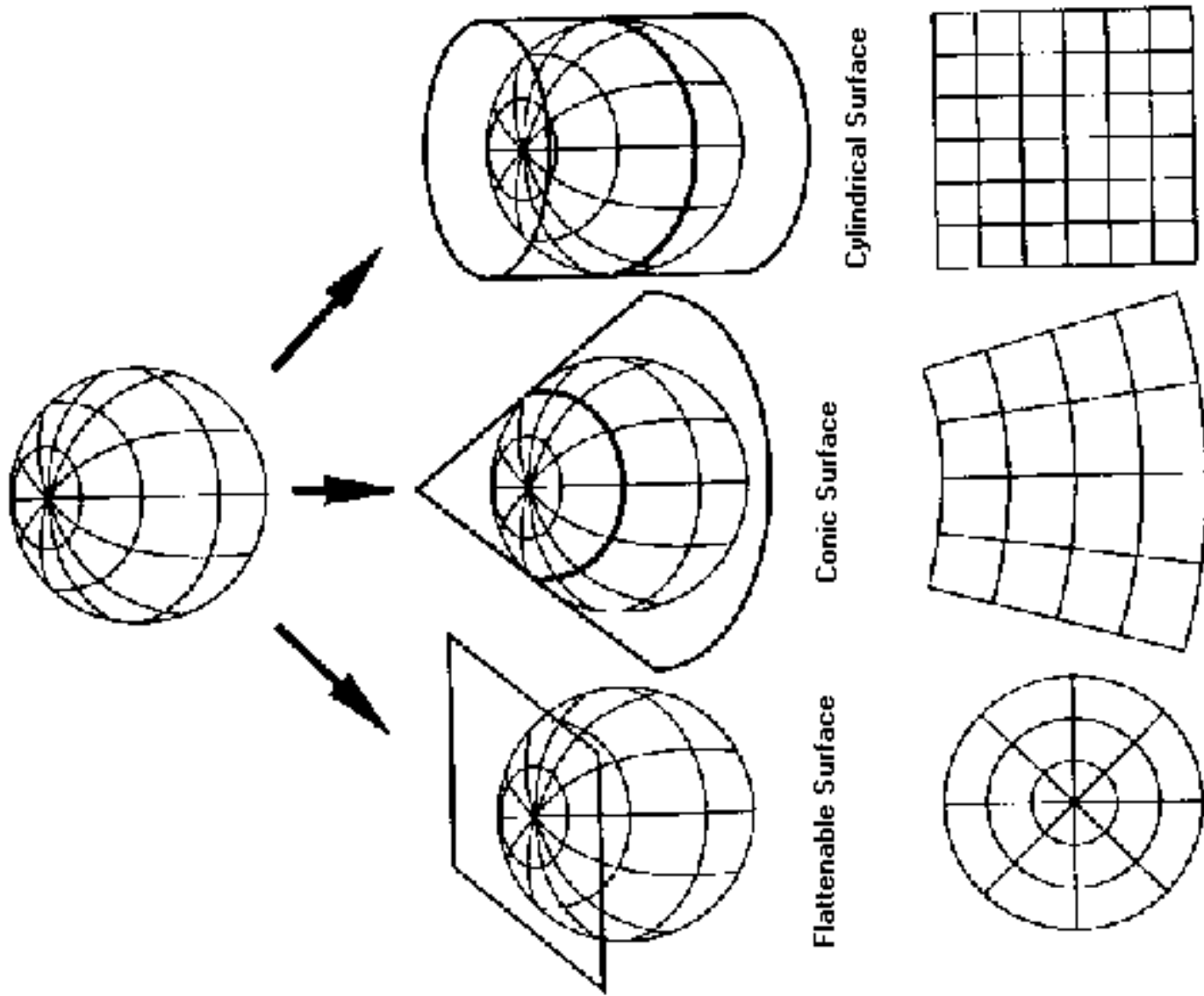


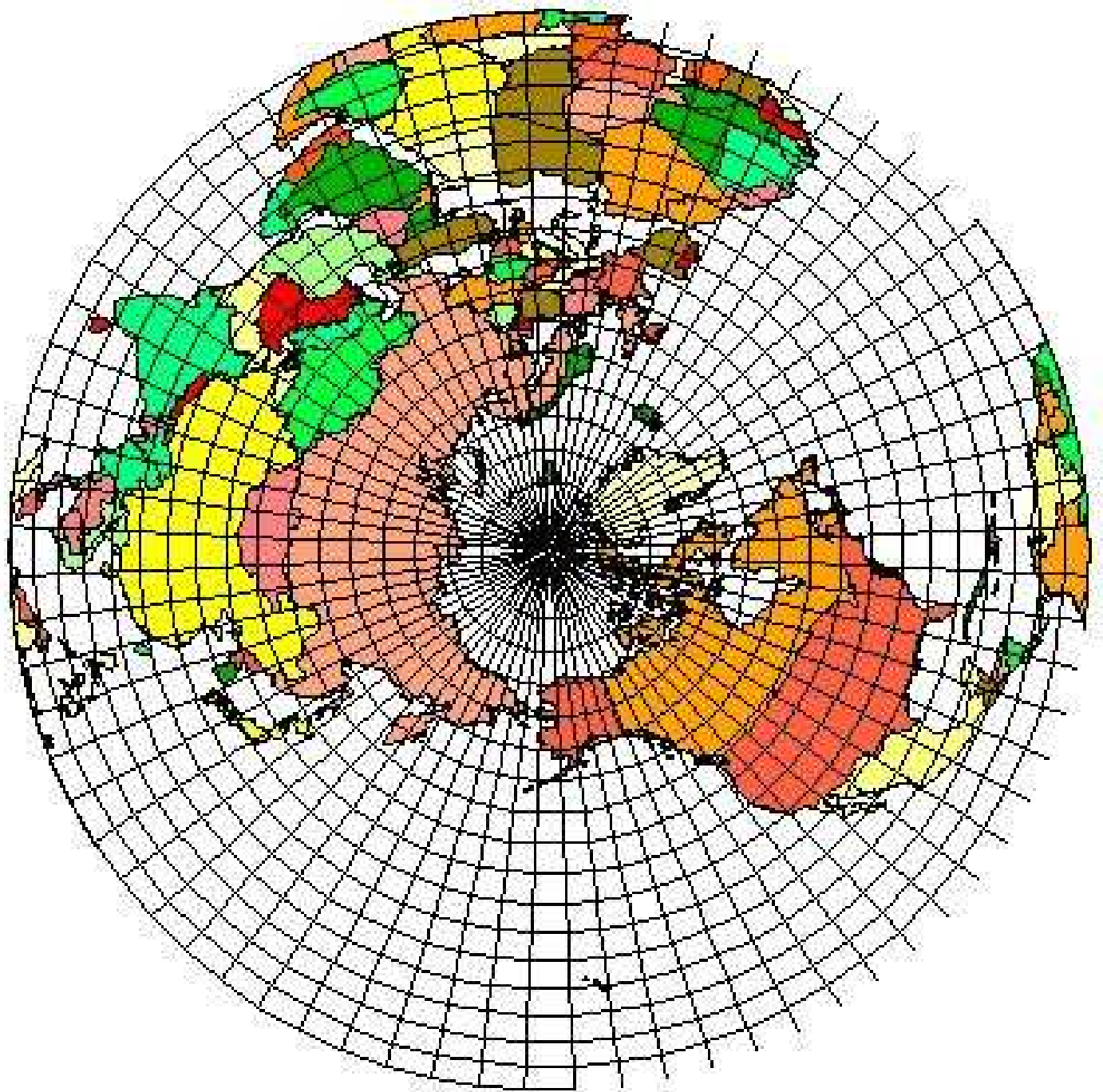
Longitude

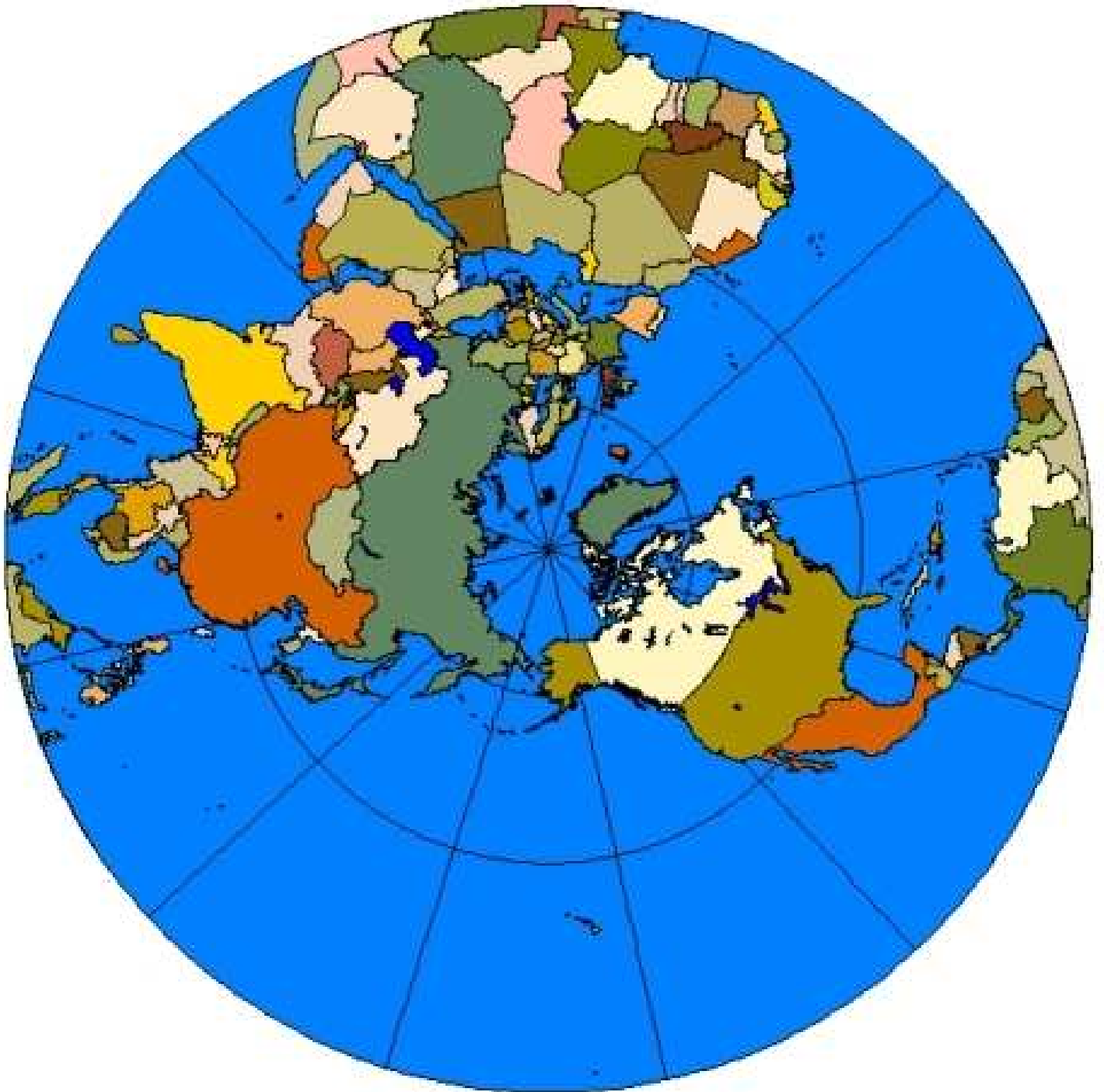
Meridiano
de Greenwich



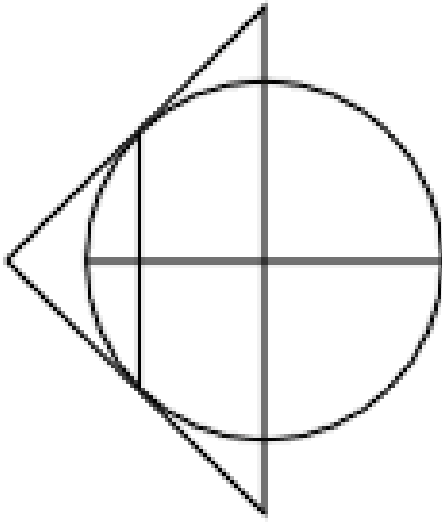
Equador



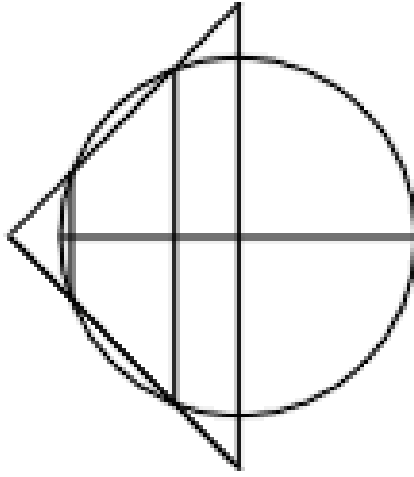




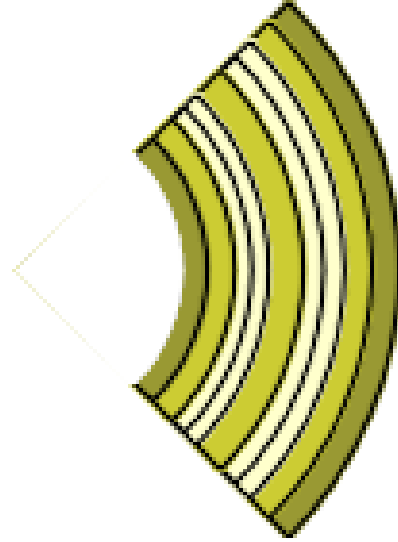
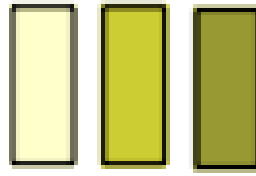
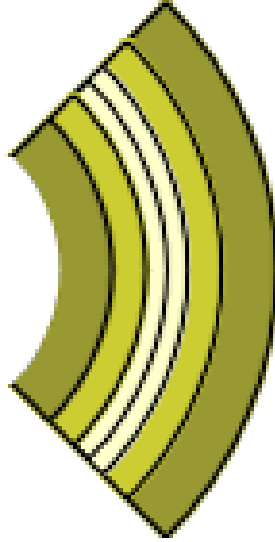
Tangent Case



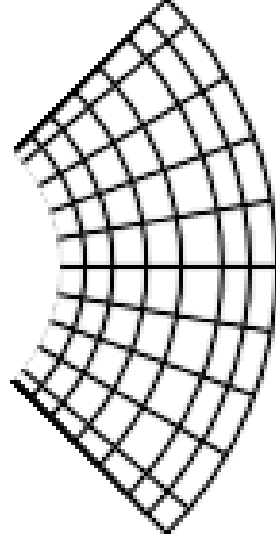
Secant Case

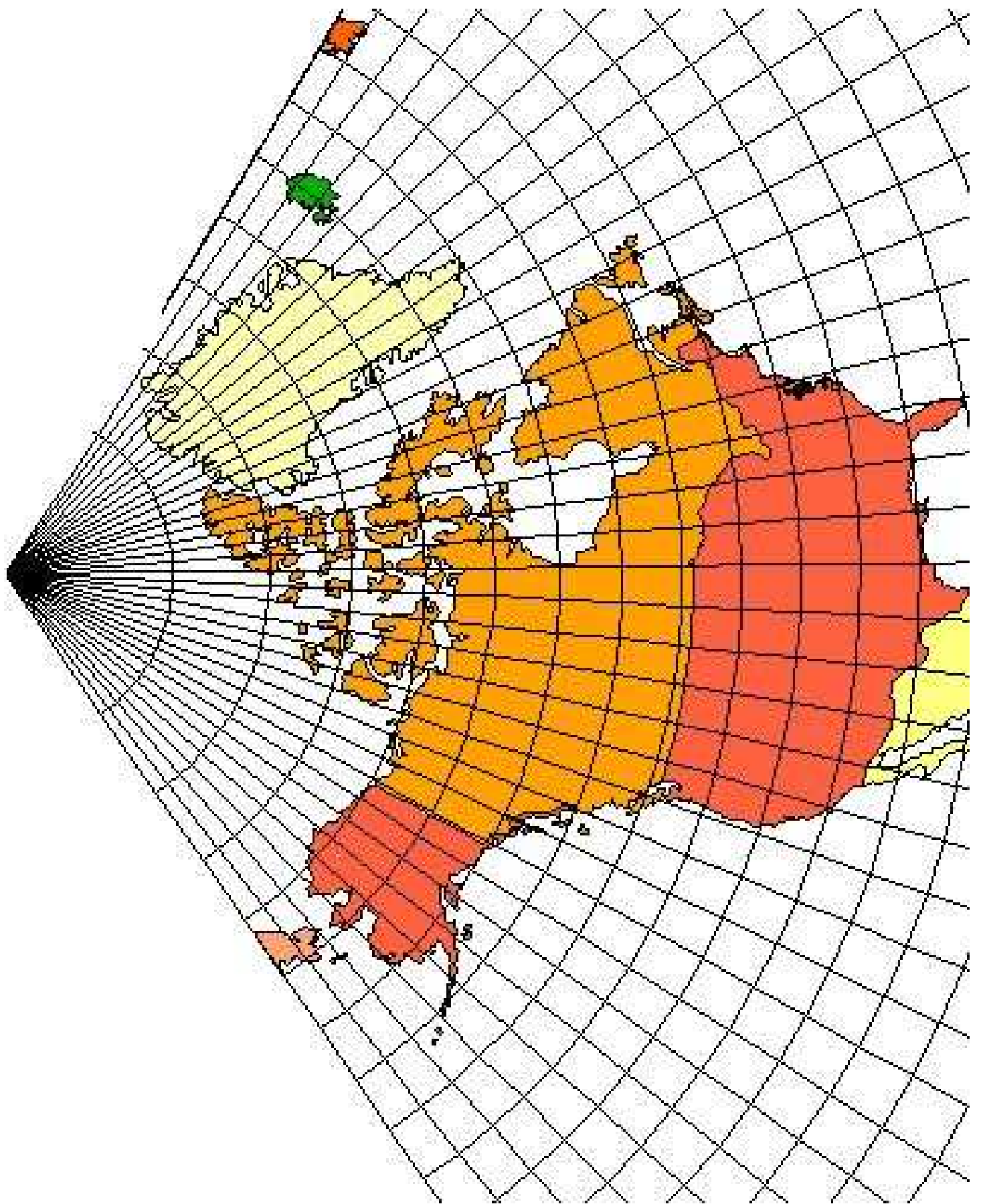


Pattern of Distortion

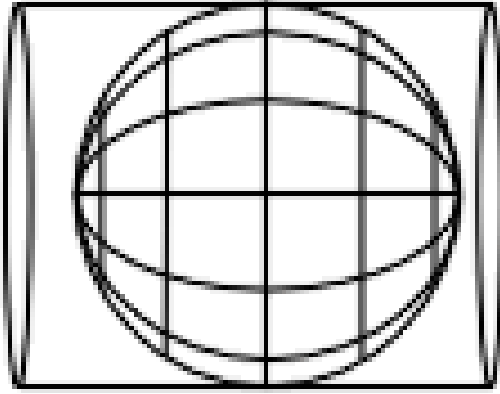


Graticule

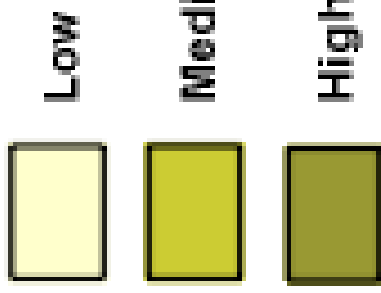
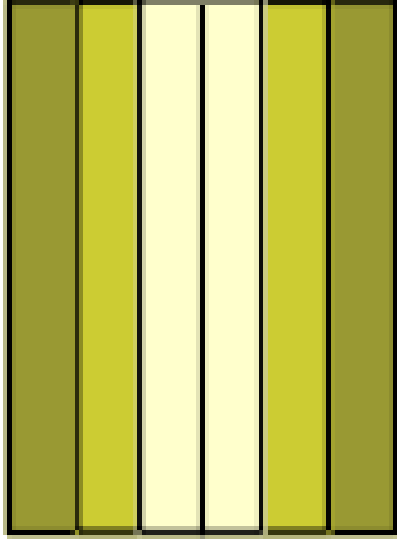




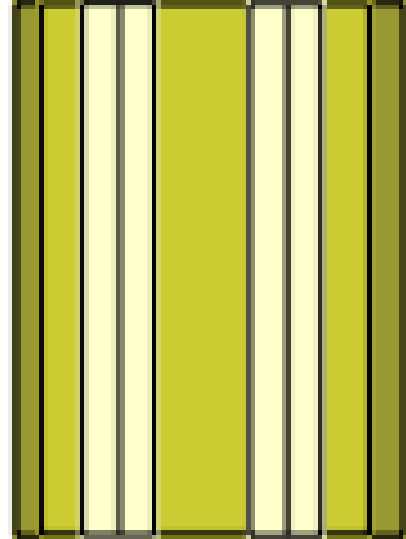
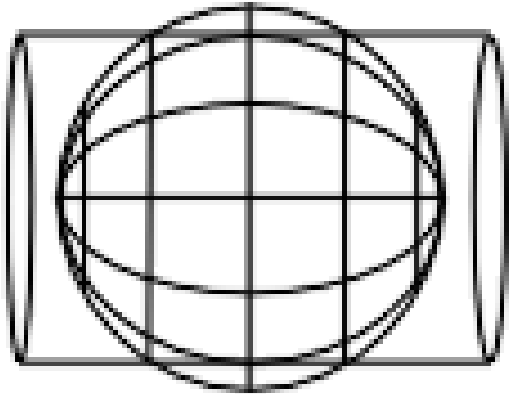
Tangent Case



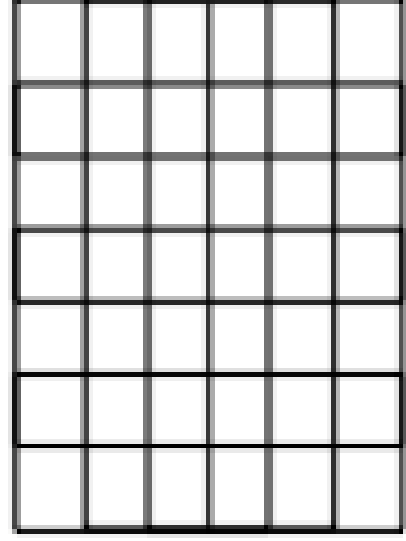
Pattern of Distortion



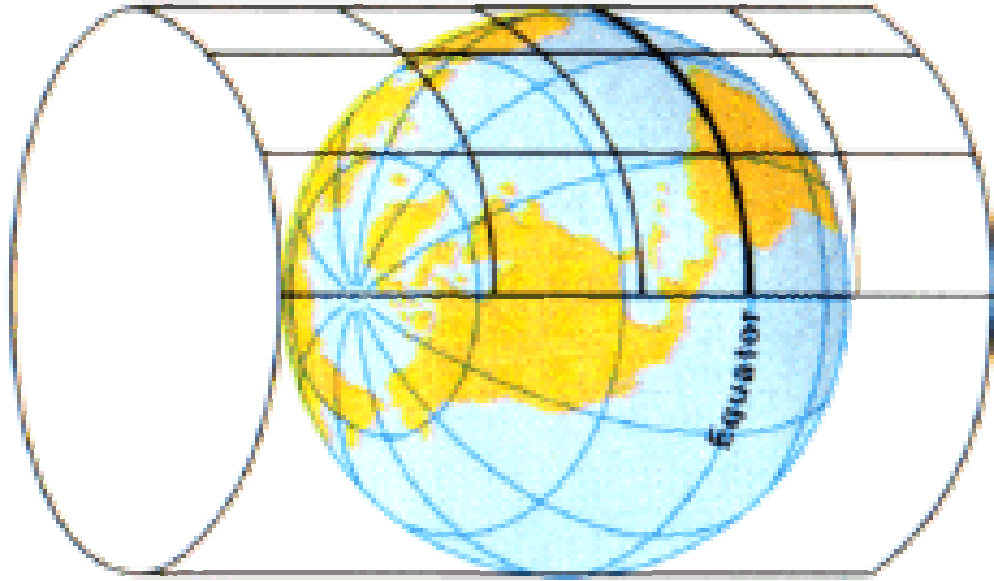
Secant Case

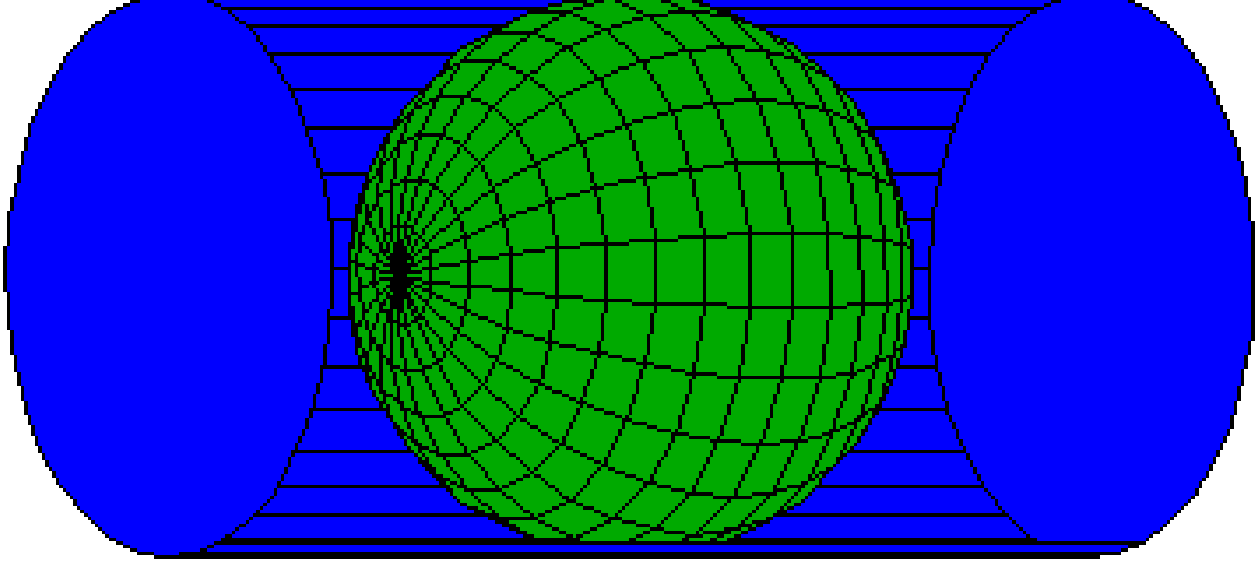


Graticule

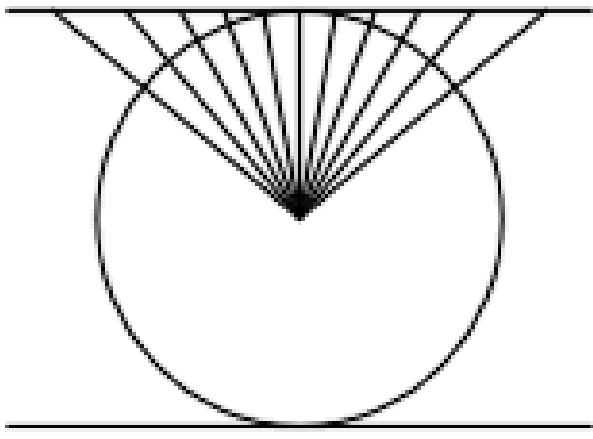
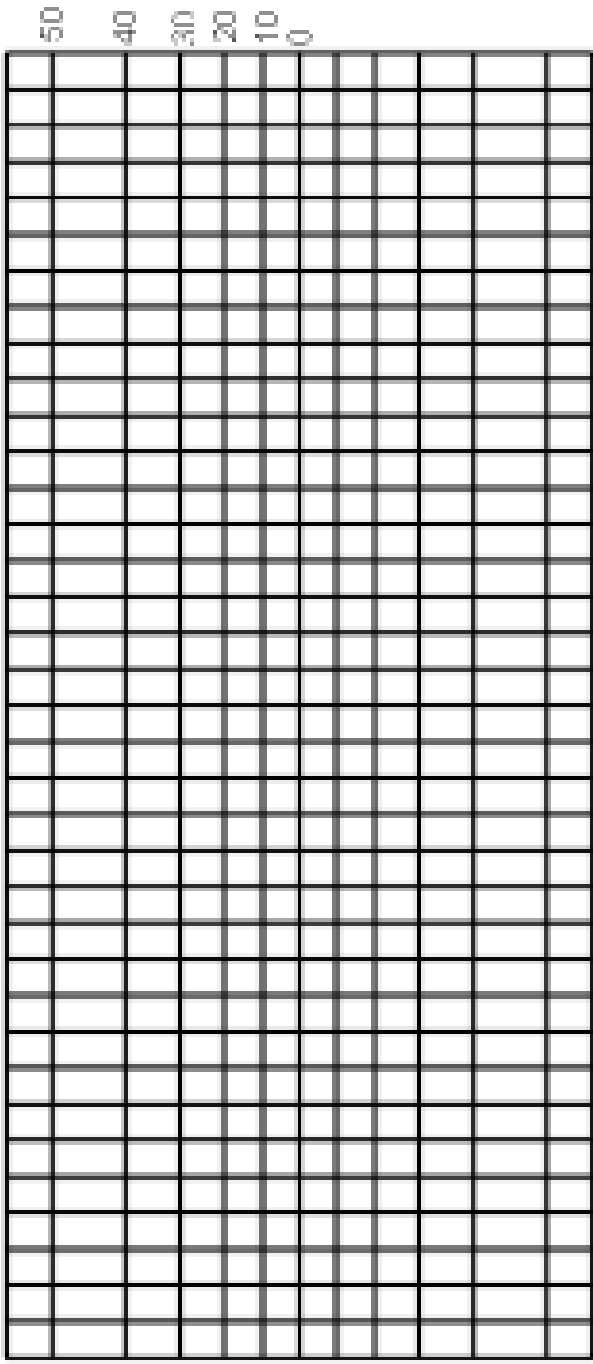


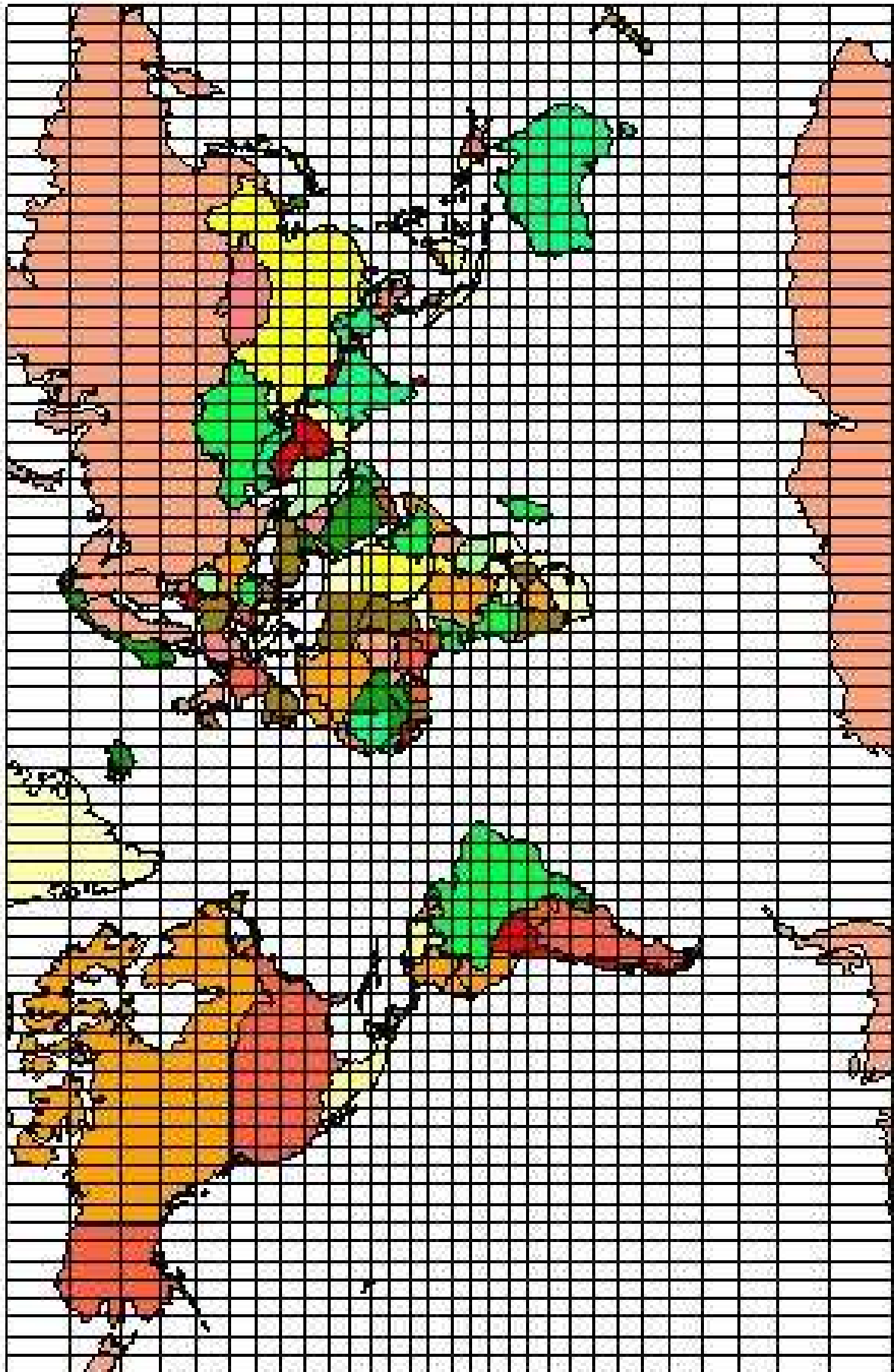
Cylindrical projection

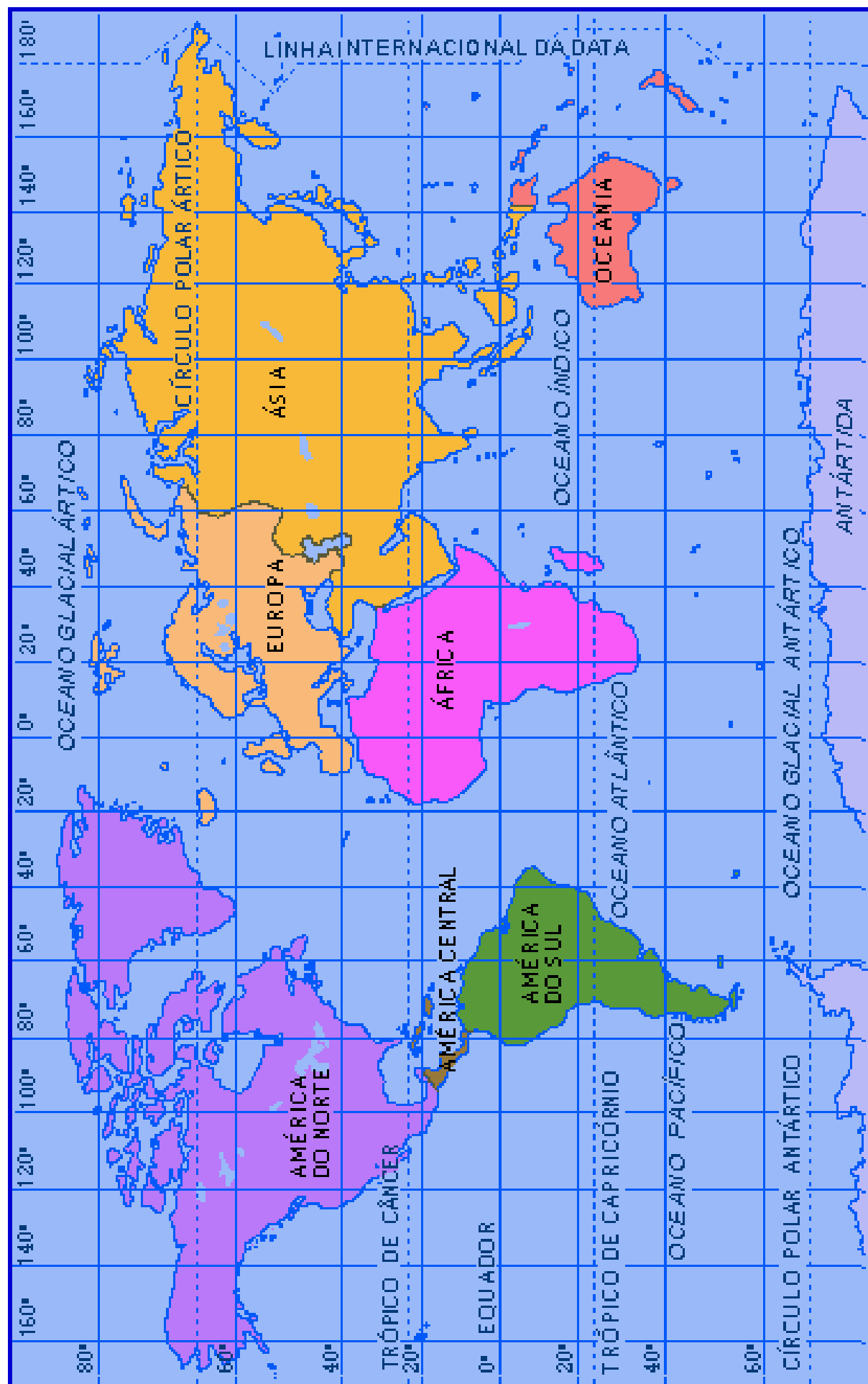




Cylindrical Projection Surface



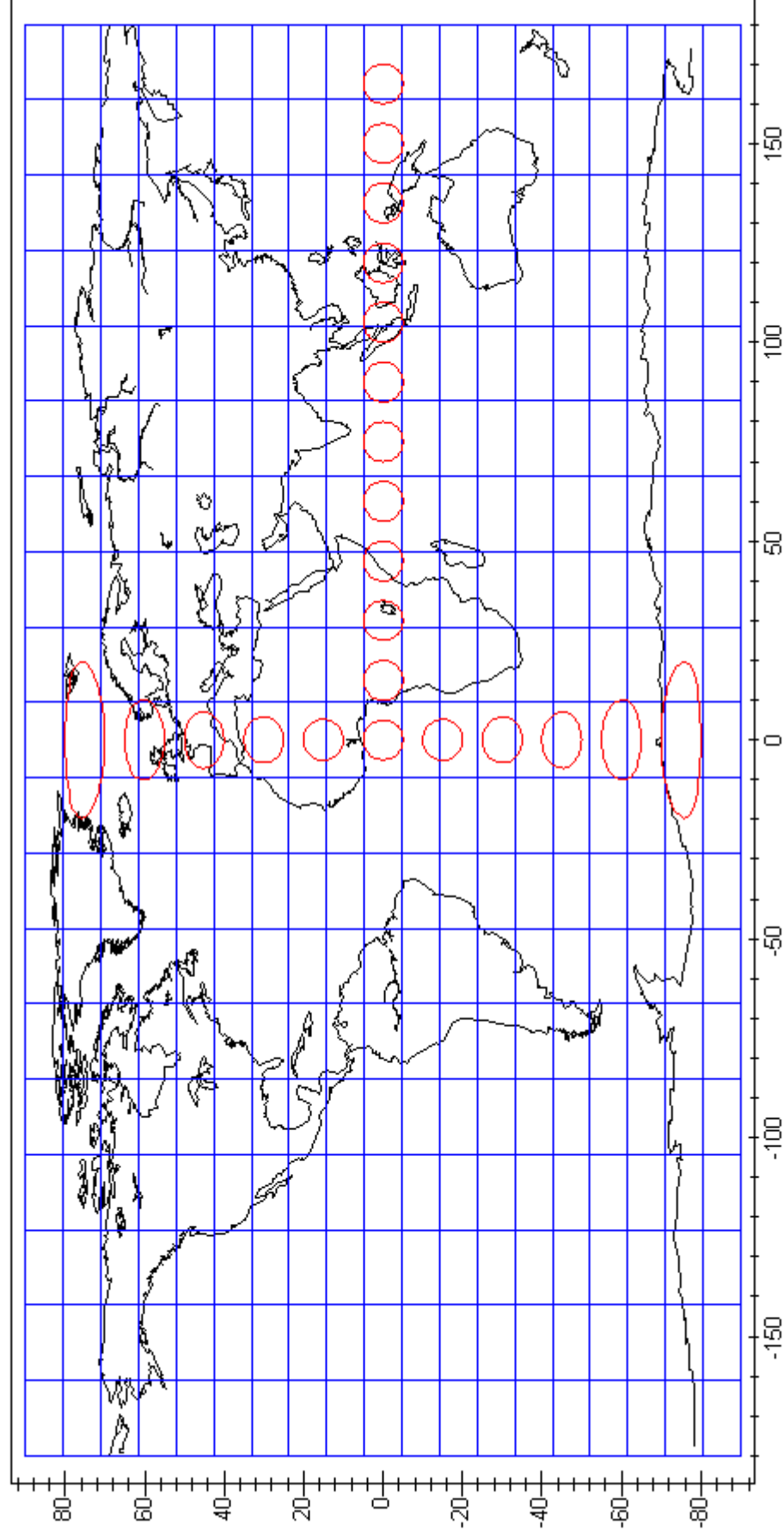




*PROJECTION PLATE CARREE CYLINDRIQUE EQUIDISTANTE
ANAXIMANDRE VERS 550 av. J. C.*

$$x = \lambda$$

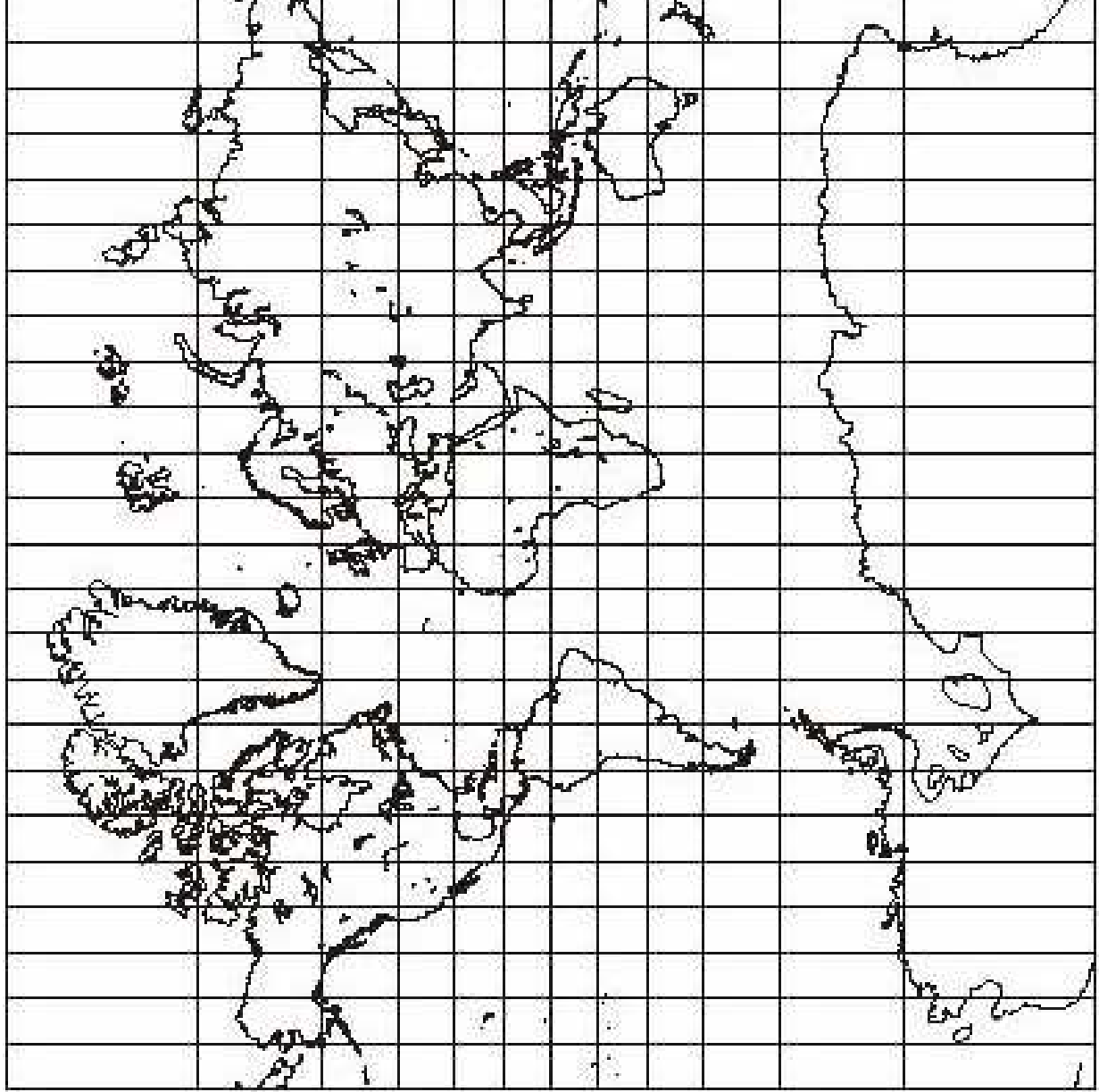
$$y = \phi$$



Logiciel PCM V 2.4 IR Projections Cartographiques avec Maple

données détaillées avec indicatrices de Tissot

Thierry Hatt, Lycée Fustel de Coulanges, avril 2000

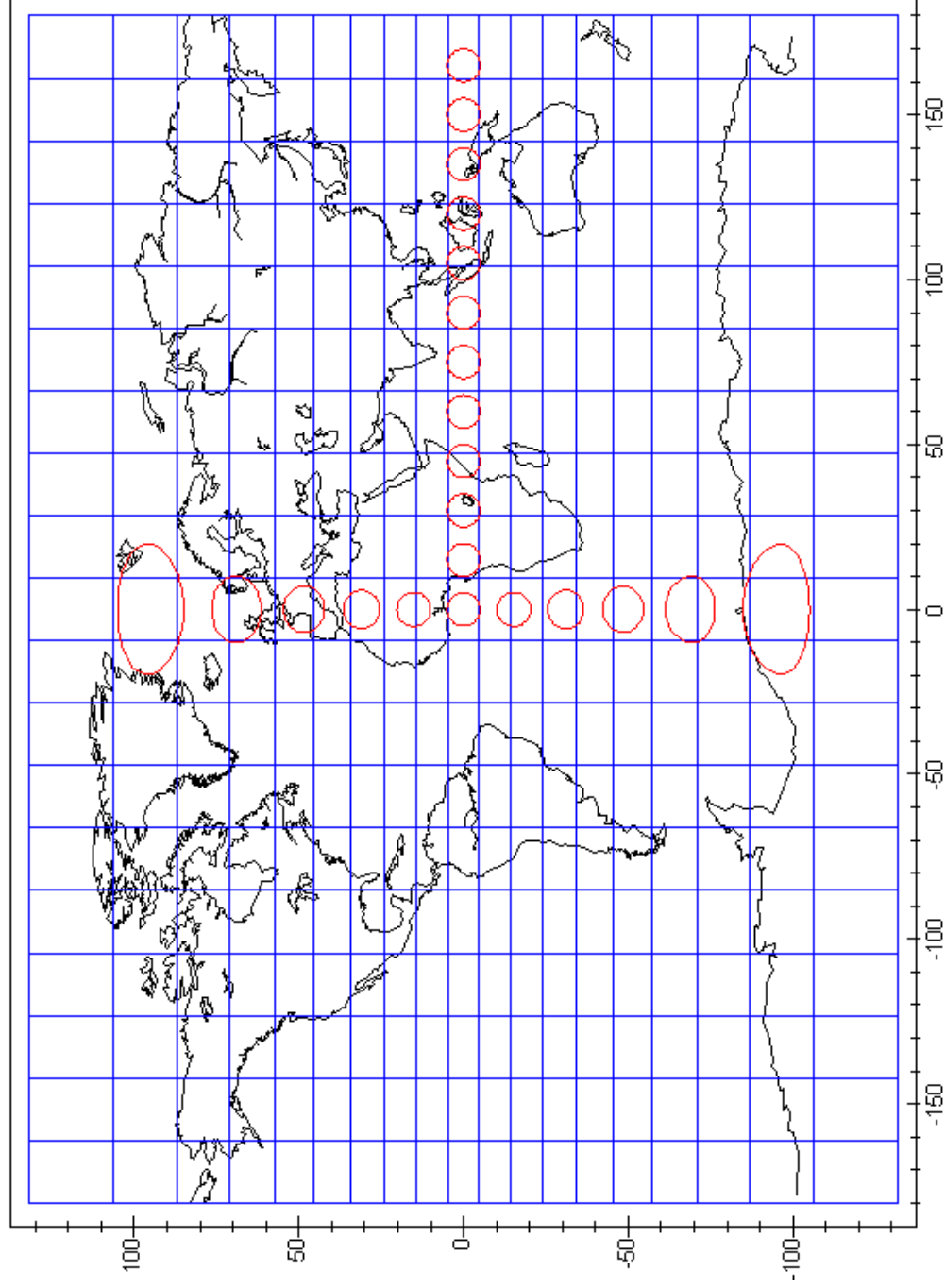


Mercator projection; Cylindrical; Conformal; Gerardus Mercator; 1569

PROJECTION DE MILLER MERCATOR MODIFIEE

$$x = \lambda$$

$$y = 1.250000000 \ln \left(\tan \left(\frac{1}{4} \pi + .4 \phi \right) \right)$$



Logiciel PCM V 2.41R Projections Cartographiques avec Maple

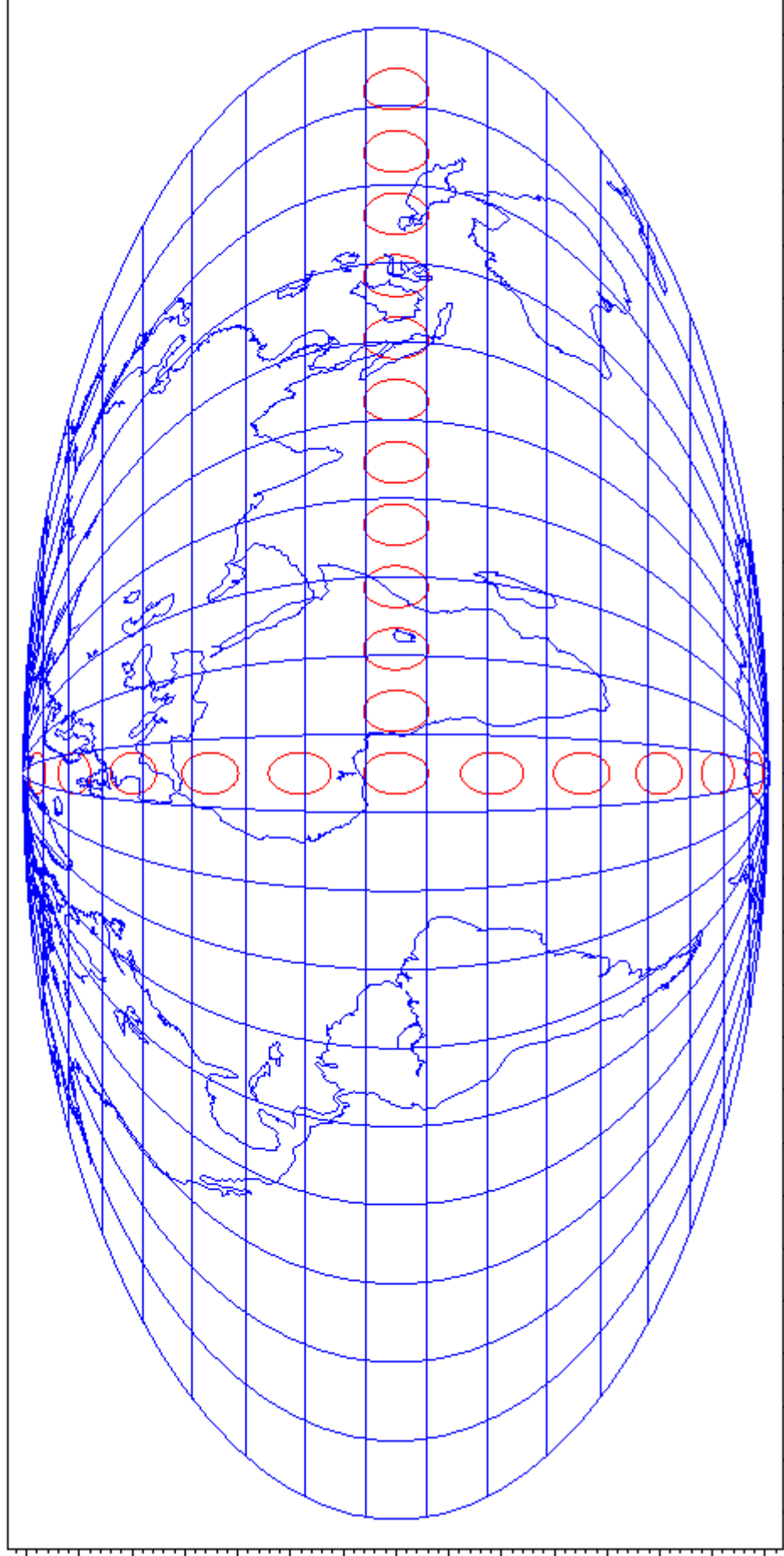
données détaillées avec indicatrices de Tissot

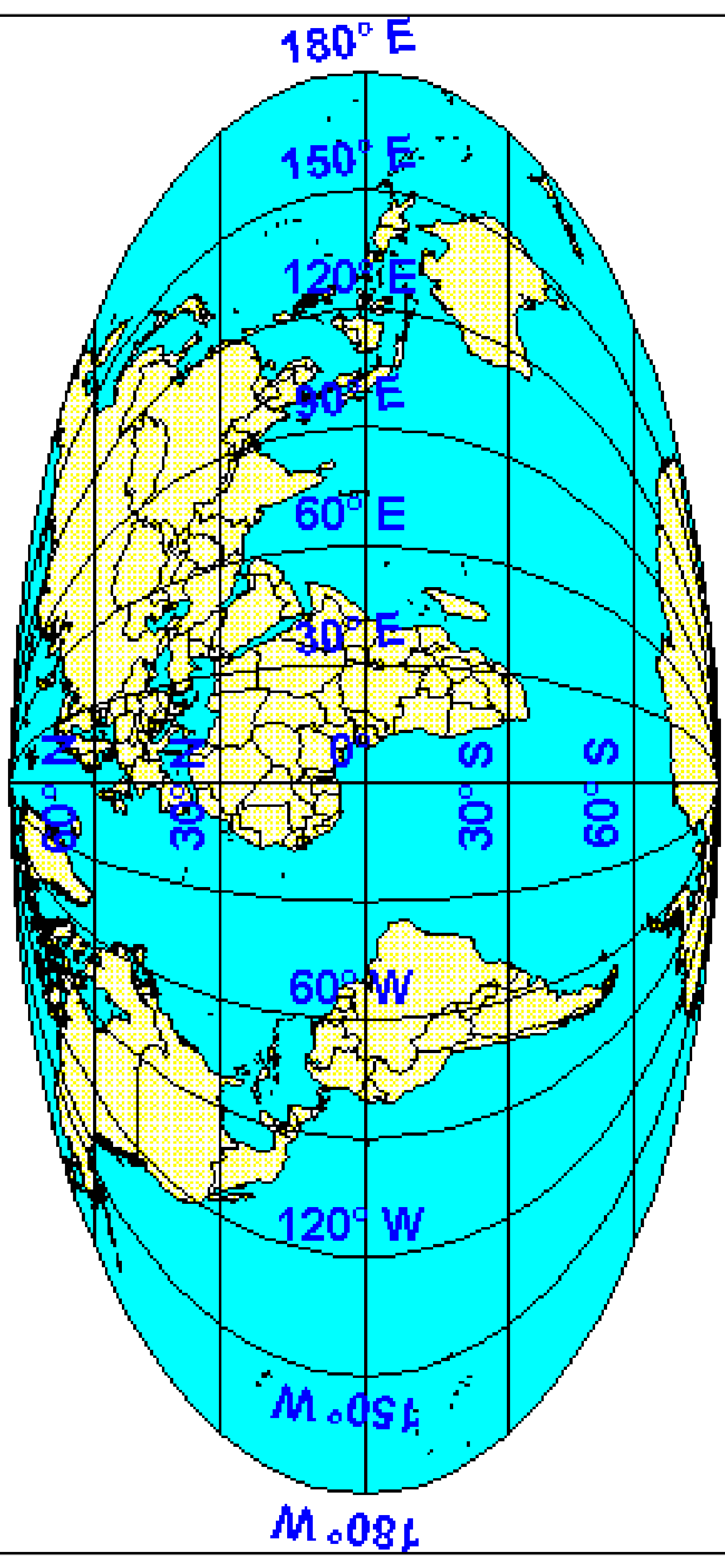
Thierry Hatt, Lycée Fustel de Coulanges, avril 2000

MOLLWEIDE pseudo cylindrique équivalente

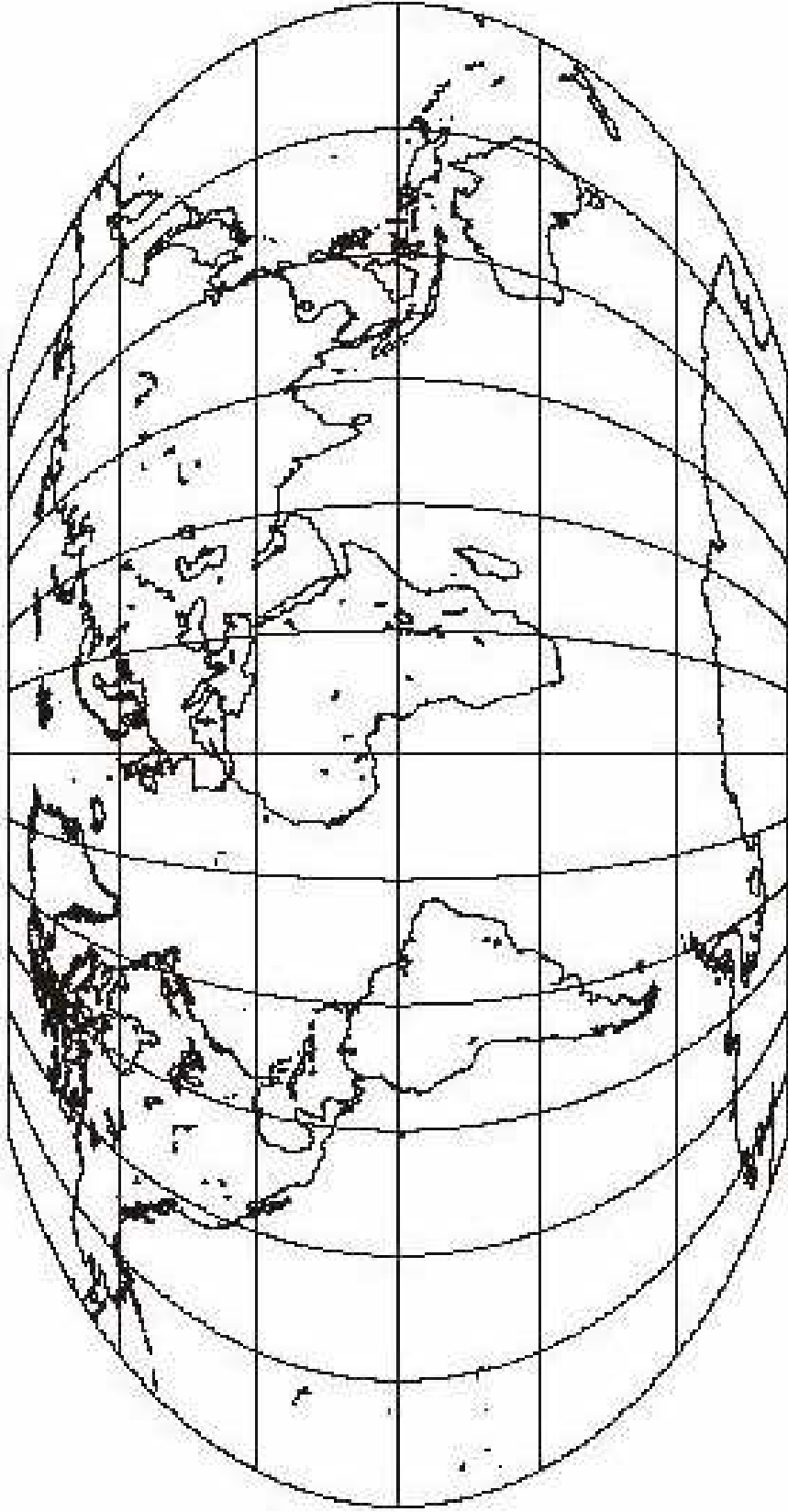
$$x = 2 \frac{\sqrt{2} \cos(\phi) \lambda}{\pi}$$

$$y = \sqrt{2} \sin(\phi)$$





Mollweide Equal-Area



Robinson projection;
Pseudocylindrical;
Neither Conformal or Equal-area;
A. H. Robinson, 1963

